

## CHAPTER III

### LOCAL CONTEXT OF THE RESEARCH SITE

In the mountainous region south of Mae Ho on Route 108 in Mae Sariang district of Mae Hong Son province, besides other villages, there exist Pwo Karen and Skaw Karen villages which have been administered by the Mae Ho sub-district (*tambon*) since the early 1970s. Along a dirt road from the highway junction at Mae Ho, it is about 20-minute drive to the village inhabited by the Skaw Karen people, Ban Mae Kanai (see Figure 3.1). Further beyond Ban Mae Kanai on this dirt road and its feeder roads, there are six main villages inhabited by the Pwo Karen people; Ban Mae Chang, Ban Dong Ku, Ban Dong Luang, Ban Huai Pla Kang, Ban Khun Wong Tai and Ban Khun Wong Nua. It takes about 45 minutes from Ban Mae Kanai to Ban Mae Chang, which this thesis primarily studies. It is another 45-minute drive from Ban Mae Chang to Ban Dong Luang which this thesis also studies.

This chapter introduces the basic characteristics of the research site selected for this thesis. To meet this purpose, historical and geographical features are described first for the two highland villages, Ban Mae Chang and Ban Dong Luang. Then, the dynamic changes in the phenomena associated with the two villages are discussed in chronological order on the stages of subsistence economy, shift to cash cropping, and gradual entry into the competitive agricultural market. Thirdly, the analysis of income-class differences is carried out for the households in the two villages concerning the landholding of swidden and irrigated terrace, yield of rice from swidden and irrigated terrace, and labourer works created by cabbage cultivation. Section 4 studies the changes in the natural environments and the associated criteria for farming, followed by a short summary of this chapter.

### 3.1 Historical and Geographical Context<sup>1</sup>

#### 3.1.1 Ban Mae Chang

In the history of the region covering the six Pwo Karen villages mentioned above, these Karen villages have interacted with each other and reformed themselves in the region since their early immigrants had moved there from Burma (Myanmar) more than two centuries ago. After the Karen had fled into the region from Burma due to the strife between the armies of King Alaungpaya and the Siamese, the Karen migrants established the first village of *Phae Khi* (Ban Khun Wong Nua), a large village which is about 10 kilometers west of Ban Dong Luang (Hinton 1975:38). At that time, the area around Ban Mae Chang and Ban Dong Luang, both of which the main research site of this thesis comprises, was not occupied yet. Thirty years later, a group of people from *Phae Khi* established the village *Thi e Li* (Ban Huai Pla Kang). Since then, the villages began to be widely scattered as in the region the population grew. Hinton (1975:36) explains that the village formation can be seen as basically two orders: major villages and their satellite villages. The satellites were formed when some households from a major village moved away to establish a separate community within the region, usually, as a result of some disputes about access to land resources.

*Mae Cang*, by which Hinton means Ban Mae Chang in his study, was initially a satellite of *Thi e Li*, which was itself an offshoot of *Phae Khi* (*ibid.*). However, the villagers of Ban Mae Chang insist that their village existed before *Thi e Li*, though they are not sure whether *Mae Cang* is older than *Phae Khi* (my interview with Mr. Palao, Mr. Tai, Mr. Tusa, and Mr. Ton in Ban Mae Chang). However, nobody in Ban Mae Chang exactly remembers when and from where their ancestors came, though it is the villager's consensus to claim that the village is more than 200 years, or presumably approximately 250 years old (my interview). Ban Mae Chang presently consists of the major part (*Mae Cang*) and its satellite part, Ban Mae Chang Bon (*Mae Cang Phu*), to make one administrative entity of village.

---

<sup>1</sup> This chapter largely benefits from Hinton (1975).

The Figures 3.2 and 3.3 show respectively the residential area of Ban Mae Chang (major part) and that of Ban Mae Chang Bon (satellite part of Ban Mae Chang). The total population of Ban Mae Chang is 298 persons from 73 households; 245 persons from 54 households<sup>2</sup> in the major part, and 53 persons from 19 households in the satellite part Ban Mae Chang Bon (my survey in February through March, 2002).

Ban Mae Chang Bon split from the major part as a satellite part to settle in the present location fifty-four years ago because villagers went in search for the new settlement area and richer arable land. After then, they moved seventeen years ago to the east nearby due to the death of the traditional village headman in their community. They stayed there for nine years. Then they moved back to the present location eight years ago (interview with the traditional village headman of Ban Mae Chang Bon on February 26<sup>th</sup> 2002). According to Hinton (*ibid.*), the satellite villages were originally independent settlements for all intents and purposes except that they shared a territory with their mother villages. In the case of Ban Mae Chang Bon, all of the annual ritual ceremonies are held in their own schedule under the traditional headman's conduct although the modern administrative system has subordinated his official authority (my interview and observation).

Looking at the transportation, the road condition from Mae Ho which is the nearest highway junction to Ban Mae Chang, it takes slightly over an hour by car during the dry season on the unpaved mountain road with two paved short-distance segments. The partial pavement of the road started in 2000 to assist the transport of cabbage from the seven Karen villages to Mae Ho, although the paved portion is still less than 1% of the road-length. In the rainy season, the condition of the road often turns out to be heavily muddy and slippery so that vehicles cannot travel easily. In Ban Mae Chang, there are three cars which are respectively owned by the official village headman and two of his relatives. It is still not unusual at all for the villagers to walk to Mae Ho and come back home on foot.

---

<sup>2</sup> The semi-official list of households which was prepared for me by the assistant of village headman, indicates this number (54) of household. In the following in this thesis, there are tables with the number of households counting 57 or 51 depending on the purpose of the table. See Tal more detailed

The name of Ban Mae Chang comes from the term of Huai Mae Chang (Elephant River). The village is situated in the mountains about 880 meters above sea level within a monsoon climate.<sup>3</sup> It is cool from November to February, followed by a hot dry season from February to May. The average daily temperature during the dry season in 2002 (averagel for 18 days surveyed from February 22<sup>nd</sup> to March 11<sup>st</sup> 2002) is as follows: 11.82 °C in the morning around 7 a.m.; 28.13 °C during daytime around noon; 20.82 °C in the evening around 7 p.m. From the beginning of May to June, thunderstorms come in the monsoon weather, while the rainy season starts from June to continue around four months either to September or to the beginning of October. During the rainy season, the weather is intermittently rainy with frequent heavy rain falls, overcast and misty. After October, rainfall becomes less with more sunshine and clear weather between the rains.

In the rainy season of 2002, the weather was seriously troublesome for the villagers of Ban Mae Chang; the intermittent heavy rain continued until the beginning of November, which caused floods and some disease for the livestock. They lost most of their livestock during the rainy season, and held three-day ritual ceremonies inside the village for the evil epidemic among the animals in the middle of December 2002.

There is one mountain peak called *Thiplin Jon* (1,034m)<sup>4</sup> in the village territory of Ban Mae Chang. This mountain can be seen from the village to the direction of NW 320°. Its surface serves as the community forest which extends in approximately 500 *rai*<sup>5</sup>. Next to *Thiplin Jon* is situated the burial mountain forest for villagers called *Plon Alon Lu*. Other mountains and mountain zones in the village are, for example; *Thiplin Phεε*, *Du Li Khu*, *Tha Po*, *Kui Pha Lεε*, and *Yo Lo Moi*. The natural resources and land use configuration concerning those mountain zones are shown in Figure 3.4.

For swidden farming, they mainly use the slope surface of these mountains in a rotational manner. The villagers know the soil quality of each zonal area. For instance,

---

information on population changes.

<sup>3</sup> According to my survey by use of the portable GPS navigator machine (Multi Navigator produced by Silva) on 26<sup>th</sup> February 2003, each elevation is as follows: Ban Mae Chang 800 m; Ban Mae Chang Bon 850 m; Ban Mae Kanai 1,000 m, and Mae Ho 1,050 m.

<sup>4</sup> According to the survey on March 6<sup>th</sup> 2003 by use of the GPS machine, the attitude and the location of the highest point of *Thiplin Jon* are as follows: altitude; 1,010 m, 8° 04' 820 N, 98° 02' 811 E.

<sup>5</sup> 1 *rai* is equal to 0.16 ha.

around the mountain *Thiplin Phæ* near which the cemetery forest *Plon Alon Lu* is situated, the soil is poor and rough with many rocks. They cannot cultivate this land, and therefore use it for daily needs such as firewood and building materials (see Remark [1] in Figure 3.4). *Tha Po* area, has been already fallowed for three years, it will be used again in future two years later. *Du Li Khu* area was already cleared by slashing to prepare for burning the field in the beginning of April 2003 (see Remark [5] in Figure 3.4, surveyed in February to March 2003). In 2002, the villagers used the land around *Kui Pha Læ*, and *Yo Lo Moi* for dry rice farming and cabbage cultivation (see Remarks [3] and [4] in Figure 3.4).

Water resources in this village are richer than those in other Pwo Karen villages in the region. There is a list of thirteen names of water currents, which contains seven streams (*klon*) and their six branch-flows (*ki*). The streams are named; *Thi Pwo Plæ* (*i.e.* Huai Mae Chang), *Thiplin Klon* (*i.e.* Huai Lao Luang), *Mæ Lod Klon*, *Thi Pu Klon*, *Thi Li Kui (Klon)*, *Na Bon Klon*, and *Thi Cha Du Klon*, while branch-flows are referred to as; *Thiplin Ki*, *Thi Phu Ki*, *Thi Piow Ki*, *Klon Chaw Ki*, *Ton Fæ Ki*, *Mumoo La Ki* and *Kuela Ai Ki* (see Figure 3.4).

In their residential area are houses with the floor raised from the ground by thick posts and with the thatched roof coming down lowly at the eaves. At the front part of their house, which is under one gable end, there is a roof-covered porch and an uncovered platform (both of which are also in the raised floor style) extending from the porch. This type of traditional house is usually made of wood for the poles, bamboo for the floor and wall, and cogon for the roof in simple frame. In Ban Mae Chang, there are several wooden houses owned and resided by official village headman and the other upper-income class households. Some villagers raise livestock such as chicken, pig, cattle, and buffalo around their houses.

Water supply systems have been set up for common use at around 20 places in the village. Electricity is not yet been available for daily life. There are two public satellite telephones in the village. One is installed at the school and the other at the headman-assistant's house. The former is available for use mostly by school teachers, while the



latter is quite often out of order.

The village school, which was established in 1973, provides formal primary education for children. It also offers the secondary education at junior high level<sup>6</sup> to the children in the region. In the centre of the village, there is a welfare house, which was set up by the Hill Tribe Development Welfare Centre belonging to Mae Ho sub-district in Mae Sariang district. The welfare house is managed by all villagers, and was accommodating a seventy-year old lady when I was in the village to carry out my fieldwork. If an emergency happens, the person in danger is carried to the closest medical facility located in the primary village of Mae Ho or to the hospitals in the towns of Mae Sariang or Chiang Mai by car available in the village.

### 3.1.2 Ban Dong Luang<sup>7</sup>

Another Pwo Karen village in my research site is Ban Dong Luang. It was researched by Hinton (1975) over three decades ago towards the end of the 1960s. The settlements of Ban Dong Luang and neighbouring Ban Dong Ku came to existence about one hundred years ago when their first settlers moved from Ban Mae Chang (Hinton 1975:36, and my interview with the official village headman in January 2003). At that time, the new settlement of Ban Dong Luang was called merely Ban Dong which now consists of the major village Ban Dong Luang (*Dong Luang*) and its satellite village Ban Dong Noi (*Dong Luang Phu*). Ban Dong Noi has already become a bigger village than Ban Mae Chang.

The Figure 3.5 shows the residential area of Ban Dong Luang (major part). The total population of Ban Dong is 505 persons from approximately 125 households. These numbers are disaggregated into 248 persons from over 60 households for the major village Ban Dong Luang, and 257 persons in the satellite village Ban Dong Noi<sup>8</sup>

<sup>6</sup> From 7<sup>th</sup> grade to 9<sup>th</sup> grade (First grade to third grade of *Matthayom swksaa* in the Thai education system).

<sup>7</sup> I owe the basic information of this section to Dr. Peter Hinton's Ph.D. thesis (1975). Meanwhile, I have also conducted my own fieldwork in Ban Dong Luang (major part) which is almost the same size in population as Ban Mae Chang including Ban Mae Chang Bon. The fieldwork in Ban Dong Luang was carried out in August and December in 2002, and January in 2003 for one week in net total.

<sup>8</sup> The correct information of the number of households in Ban Dong Noi could not be collected in my field

(surveyed in January 2003). Hinton (1975:39) reports the context of settlement Ban Dong Noi as a satellite part from Ban Dong Luang as follows: At first, about ten households moved to the new territory nearby Ban Dong Luang; Over a period of about ten years, they gradually drifted back to the parent village; For a time, there was the one large settlement in the territory until a new satellite part, Dong Luang Phu (*i.e.* “Little Dong Luang”), was formed by six households in around 1965. The reason for the split of the satellite community was reportedly due to an unresolved dispute over the ownership of some livestock (*ibid.*). After that, during Hinton’s research, the number of households in Ban Dong Noi grew to fourteen. It is presently approximately 70 households with population over 250 persons, which is more than that of its mother village (surveyed in January 2003).

Hinton (1975) reports on the growth of Ban Dong Luang since its pioneer group settled in the area. Three households (two of which were connected by a sibling link), totalling 26 persons, moved from Ban Mae Chang to be the first group to settle in Ban Dong Luang (Hinton 1975:50). By the end of 1969, there were 39 households and 170 persons in Ban Dong Luang and its satellite part Ban Dong Noi. Out of them, the 25 households with 133 persons (64 percent of the total households and 79 percent of the overall population) were direct descendents of the pioneering group, and the population among this group increased by 41.1 percent over seventy years. Regarding the other lineage of settlers to Ban Dong Luang, Hinton reports that they came mainly from *Thi e Li* about ten to twenty years after it had been established (Hinton 1975:51). The population growth was primarily due to natural increase of the pioneer-descendants for the previous half century at the time of Hinton’s study, and the social change was only a small proportion (Hinton 1975:52). In three decades after Hinton’s study, the population of Ban Dong Luang has expanded about three times, over 500 persons. According to the Pwo Karen people living near Ban Dong Luang, this excessive population growth has been mainly attributed to the new immigration by marriage<sup>9</sup> since new couples tend to

---

survey except that the number is around seventy.

<sup>9</sup> During my interview, I asked the reason why. But I could not get any appropriate answers to this question

stay inside Ban Dong Luang village area after marriage (my interview with Mr. Palao and Mr. Tusa in Ban Mae Chang).

As for the road access, one passes the T-junction on the way to Ban Mae Chang. Taking the right route<sup>10</sup> to Ban Dong from the junction, the cabbage fields can soon be seen, if it is in the rainy season, extending on the mountain-side up to the far-stretching upper ridges. The pea-green rice field is seen in the valley paddies. Ban Dong Noi is located before Ban Dong Luang. In the rainy season, the narrow dirt road, which is the only way for the villagers to transport cabbage to Mae Ho, is terribly muddy and slippery. There are nine cars possessed by the villagers in Ban Dong Luang, and eight in Ban Dong Noi. Among the younger generation, motorcycles are more popular than cars as access means to town areas. There are more than six motorcycles in Ban Dong Luang (surveyed in 2002).

The altitude of Ban Dong Luang is around 1,050 meters above sea level, which is higher than that of Ban Mae Chang. “Dong Luang” of the village’s name means “great forest,” and “Dong Noi” means “little forest.” The village is located on the plateau surrounded with arable fields on the mountain surface and by the holy mountain of the village, called *Don Long Jon* (Doi Dong Luang) located in the direction of SW240° from the centre of the residential area of the village (see Figure 3.5). The mountain area is used as the community forest (*c.a.* 500 *rai*). There are three water resources in the village; *Thi Ju Ke*, *Thi Tho Kha*, and *Thi Na Ii* (water fall). To the east of the village, a steep incline dropping about 300 meters extends to the bed of the Mae Lit River (Nam Mae Lit) around which the branch of the river *Thi Ju Ke* is available for wet rice farming. Another stream available for farming is *Thi Tho Kha* (Huai Nao), along which seven households cultivate 20 *rai* for wet rice (surveyed in 2002).

Arable land scarcity has been a serious problem for the villagers since several decades ago. At present, the villagers cultivate almost all of the available area around the village. They have already changed their traditional swidden cultivation with a fallow rotation scheme into a new cycling method in which they grow cabbage and dry rice in

---

from the villagers.



turn annually in the same two or three plots. Nearly every household is involved in the cabbage cropping. A few households are not doing cabbage cultivation because the household members are too old to grow cash crops, though their children in separate households support these aged with the income from cabbage cultivation. Several households do not presently grow cabbage by themselves, but they are engaged in it as labourer inside and outside the village. Those who have not produced cabbage yet by their family, are searching for the chance to grow cabbage to make their living. Almost everybody in this village claims that they have nearly no agricultural choice to survive but cabbage.

There are now a number of wooden houses in Ban Dong Luang. Hinton (1975:60) records thirty years ago that each household was built of bamboo and timber with a steeply pitched thatched roof. Nowadays, however, the lower income-class villagers who have not been successful in cabbage cultivation still reside in the traditional-type of bamboo houses. Some of the richer household family are living in wooden houses and raising a number of livestock such as chickens, pigs, cattle, and buffalo around their houses. Simple water supply systems and toilets have been installed in several places inside the village. Electricity has not arrived here yet. The village school has been opened for the children from kindergarten level to the elementary-school level.

Ban Dong villagers know that there are still abundant forest and water resources in the territory of Ban Mae Chang, and used to frequently exploit the woods in Ban Mae Chang for their daily use. One successful cabbage producer in Ban Dong Noi has used the water resource in the paddy field of Ban Mae Chang for intensive cabbage cultivation during dry season by using sprinkler, under a certain contract with Ban Mae Chang villagers. The villagers in Ban Dong Luang and its nearby Karen villages have common consciousness that the forest in Ban Dong Luang has become exhausted and cannot be utilized any longer. This is a type of negative experience among the Karen regarding their resource management issues.

---

<sup>10</sup> If we take the left route, it leads us to Ban Mae Chang.

## 3.2 Dynamic Changes in the Past Forty Years: Ban Mae Chang and Ban Dong Luang

### 3.2.1 1960s – 1970s: Period of Subsistence-oriented Economy

The Pwo Karen people in the mountainous area of Mae Sariang in northern Thailand are the descendants of the first settlers there from Burma around more than two centuries ago. While many of the Karen people who have lived in northern Thailand since the nineteenth century, have made relationships with the Yuan people who were dominant in the region at that time, there were groups of the Karen who have lived in almost autonomous communities without any authority over them. The group of the Pwo Karen people who have resided in the forest of Mae Sariang, is one of such groups (Keyes 1979:50). Hinton describes the status of the Pwo Karen there as the isolated, who had “no tradition of having paid tribute to the Thai prince of Lamphun and Chiang Mai, nor did they give any form of payment to the Lua’ whose former agricultural land they occupied” (Hinton 1969:9, cited from *ibid.*) in contrast to the Skaw Karen.

As the time went on to the 1960s, Kunstadter (1968; cited from Hinton 1975:34) describes about the Karen people in the area of Mae Sariang in his research time, that the Karen were much more involved with the Thai because of the proximity of a Border Patrol post, and their relative ease of access to Mae Sariang. However, this is the description about the Karen residing in the vicinity of the Border Patrol post from which the area where Hinton carried out his fieldwork during the 1960s is at a distance. According to Hinton, the situation of that area was then “more isolated than most” in such respects as: the people in the area were not Buddhist, and very few had Thai literacy; politically, no intervention from authorities of the Thai government (including the impacts of police, education and medical agencies) so that they could maintain their own affairs; economically, they marketed small amounts of produce, but were in most respects self sufficient (Hinton 1975:4, 34).

The isolated situation of Pwo Karen villagers in the mountain area was much

greater before the completion of Route 108 connecting Hot and Mae Sariang in 1950s. Before that, for the Karen people in the area, it was three-day journey from their villages over a rough road to Mae Sariang, which was, and is still, their main important point of contact with the outside world. At the time Hinton studied the region in 1960s, a public bus service to Mae Sariang from Mae Ho junction was already available.

At the end of the 1960s, The White Monk (*Khruba Khao*) movement flourished in the town of Mae Sariang. *Khruba Khao Pi* received a large following among the Karen with his cult. Some followers of *Khruba Khao Pi*, from Ban Mae Chang, Ban Dong, and some other villages in the area of Mae Sariang and Omkoi, moved to Pha Nam, Li District in Lamphun Province mostly in around 1970 to 1973 (Hinton 1975:28-29, Kwanchewan 1988:97, 121).

In 1963, the Hill Tribe Development and Welfare Centre in Mae Hong Son was established at Mae Ho. In Ban Mae Chang, the government's Tribal Development and Welfare Unit (TDWU) was set up in 1964, to govern this village and its neighbouring Karen villages including Ban Dong Luang. It mainly focused on agricultural development in the region to promote wet rice farming and the cultivation of cash crops such as coffee and cabbage (Kwanchewan 1988:102).

After 1964, the TDWU set up an informal village school in Ban Mae Chang. It was incorporated into the formal primary school to provide formal education for children in 1973. Some of the villagers who are at present over thirty-years old recall their childhood when they saw the road under enlargement-construction, and when cars came up to the village school (interview with Mr. Tai and Mr. Pit). This means that the road was widened for the automobile around the time when the school was built. Since the 1970s, the official program to control malaria disease has been implemented by the concerned government office in the region.

### **3.2.2 1980s – 1990s: Period of Introduction of Cash Cropping**

Since the Hmong group had come to grow cabbage by using the hilly mountain-surface fields in the vicinity of Ban Mae Chang and Ban Dong Luang, the villagers in the

region have been engaged in cabbage cultivation. At the beginning, they were hired as labourer by Hmong people, and learnt how to grow cabbage through their work with the Hmong. In Ban Dong Luang, some of the villagers embarked on cash cropping fourteen years ago in their arable swidden field. This was when the villagers decided to change their self-sufficient farming system into the new farming scheme mixed with cabbage, the mono-commercial-crop (interview with the official village headman in August 2002). After that, for over a decade until today, the other villagers have gradually started to follow the pioneering group to grow cabbage. Presently, almost all farmers in Ban Dong Luang are engaged in cabbage cultivation.

Cabbage cultivation by the Ban Mae Chang villagers was also launched in swidden and irrigated terrace fourteen years ago, in the same time as Ban Dong Luang. In the beginning, a number of households in Ban Mae Chang engaged in cabbage cultivation. However, they experienced a big loss five or six years ago. After then, only around 10 families have been regularly growing cabbage, near the road in Ban Mae Kanai (interview with Mr. Puta in August 2002).

As for infrastructure, the water supply system in Ban Mae Chang was set up by the government during this period. In 1997, the Civil Engineering Development Bureau, the Ministry of the Interior, set solar panels for charging batteries inside the village. At the same time, two telephones were installed; one at the village school and the other at the village-head assistant's house near the entrance of the village. Toilets were constructed for ten houses in Ban Mae Chang by the Public Health Care Centre in Mae Sariang around the year of 1999.

The village school in Ban Mae Chang serves not only as a primary education centre for the village children, but also as the sole core centre for the formal high-school education in the region. Since 1999 the school has provided the junior-high school education (grade 7-9; *Matthayom* 1-3 in Thai) for the youths from Ban Mae Chang and six other nearby Karen villages. After the basic hard-ware infrastructure of buildings for education had been constructed by the government, the school has steadily improved itself relying on external financial aid and NGO volunteer work from both domestic and

international supporters.

During this period of the 1980s through to the 1990s, not only physical school facilities were developed, but also good relationships between this village school and the villagers were established. It is because the former school principal, who had served in the village for eleven years in the 1990s and the early 2000s, was keen to devote himself to improving the educational environment for the village children. This cooperation between school teachers and villagers introduced several external supports with help by local NGOs. This school principal was assigned to a school outside the village in 2002.

### **3.2.3 2000 – Present: Period of Market Economy and Its Related Public Policies**

Since 2002, the new building for the Hill Tribe Development and Welfare Centre at Mae Ho has been under construction using money granted by the Japanese ODA programme (Grass-roots Assistance Grant)<sup>11</sup>. It is reported that the office is attempting to enlarge its facilities through which they will be able to provide the highlanders in and around the Mae Ho region with training courses to promote their agricultural production activities (interview with the official of the centre on March 11<sup>th</sup> 2003).

The village school of Ban Mae Chang has about 130 pupils from kindergarten up to ninth-grade (surveyed in February 2002).<sup>12</sup> The enrolled children are studying with six teachers and two temporary workers, all of whom come from the urban areas outside the village. Under the formal education code in Thailand, after the school is over in the late afternoon, the school children gather together at a school playground in front of the national flag to watch it being taken down, and to pay their respect to the nation and the Buddha image. School students study based on the nationwide standardized educational curriculum, in which the central Thai language is used as the official one, though the children communicate with elder persons, their family and peers in Pwo Karen language in the village daily life.

Responding to the recent serial educational reform programs in Thailand, the

<sup>11</sup> This building was completed in April, 2003.

<sup>12</sup> The number of enrolled students was reported about 150 by the school teachers at the survey a half year later in August 2002.



village school needs to be expanded in order to provide senior-high school education for the students from both inside and outside the village in the region. It is to be noted that, at present, compulsory education for the Thai people is until grade 9 (*Matthayom 3*). From late February until the middle of March 2002, an NGO group of university students from Japan<sup>13</sup> which has been collaboratively working with a local NGO, completed the construction of a new concrete school building to assist the school to prepare for the future increase in students in the grades of senior-high school education (*Matthayom 4-6*). It is planned that the senior-high school education will open in the village after 2003, provided that enough students will be enrolled from the region. From February to March 2003, the program for the construction of the simple-frame flush toilets and a water supply system by the same Japanese-university NGO group was carried out in the residential area of Ban Mae Chang and its satellite part, Ban Mae Chang Bon.

In the rainy season at 2002, 23 households (19 from the mother village Ban Mae Chang and four from its the satellite village Ban Mae Chang Bon) grew cabbage, mainly using the Village Fund 2002. The majority of them had been looking for the chance to engage in cash cropping for a long time. If there were investors to give them the opportunity to grow cabbage, most of the villagers would be willing to embark on it. The result of the yield is, however, never certain. Five of them lost between 4,000 baht and 20,000 baht due to the misfortune of heavy rain and the shipping timing. Other gained some benefit but, mostly, only a small amount (surveyed in December 2002). Under the present available market conditions, it is the only feasible way for the villagers to grow cabbage in order to make more cash, even though it is rather risky.

The policy of Village Fund 2002 significantly effected the highland farmers in embarking on cabbage cultivation although this kind of official fund has been offered to the villagers before from time to time.<sup>14</sup> Only six from 54 households in Ban Mae Chang did not borrow any amount of money from the Village Fund. Among these six

<sup>13</sup> This program of the Japanese NGO group, called The Gakushuin Overseas NGO Volunteer Activity Programme (GONGOVA), was carried out in Ban Mae Chang on February 21 – March 11 in 2002 (GONGOVA2002) and also during the same period in 2003 (GONGOVA2003).

<sup>14</sup> The policy of Village Fund 2002 is distinctive from the previous funding loans in the sense that it provides the larger amount of loan, 1,000,000 baht per applicant village.

families, one is a fatherless family, and three are new families just separated from parents to set up new households. The other remaining two are in the middle and poor income classes<sup>15</sup>, and their family members grow only dry rice and work as labourers for cash inside and outside the village. Others all borrowed money from this system for the purpose of cabbage cultivation, or loans for motorcycles and other rather expensive commodities as well as for their daily consumption. Amongst those who borrowed the money, however, at least one villager rethought the potential risk of this loan and returned it together with 3% interest before using it. He asked one of his rich neighbours to loan him for the repayment of the Village Fund, with more interest to be paid to the neighbours. The time to apply for the loan of the Village Fund 2003 came as the new-year of 2003 arrived. As a matter of fact, that villager who borrowed the money from his neighbourhood for the repayment of the Village Fund 2002 without using it, had been waiting for this time to come, in order to return the loaned money back to his neighbourhood (interview in January 2003).

### **3.3 Social and Economic Context: Ban Mae Chang and Ban Dong Luang**

#### **3.3.1 Social Institutions: Village Administration, Marriage and Belief**

In the present village administrative system, there is one “elected official village headman” and two “elected assistants to the headman.” In addition, two sub-district administrative office (*O.Bo.To.*) members are elected from the villagers. The official headman is a representative of the village, and is responsible for the relations between the village and the local government office in Mae Sariang district. He and his two elected assistants conduct their function to perform administrative tasks. They generally have the ability to speak in Thai. All of those three elected persons can have a relatively higher income than other villagers through regular monthly salary and some additional benefits.

In the both Pwo Karen villages, Ban Mae Chang and Ban Dong Luang, their religion is basically Buddhism mixed with animistic belief. There is a traditional religious village headman (*chia kei khu*) in each village. The top authority of the

<sup>15</sup> See Table 3.1 of this Chapter for the income classification of the households.

community used to be this religious village headman, who led almost all village activities, making decisions on the schedule for the ritual ceremony for the community, assigning each farming area for each household every year, and settling conflicts among the villagers. His status is still the highest in the ritual hierarchy, and the office succession is hereditary, as his eldest son usually inherits the post (Hinton 1979:83). Meanwhile, there is a female spirit head (*ther mue khae khu*) whose concern centres around the sound health of the members of the lineage in the village (Kwanchewan 1988:86, and interview in August 2002).

The strongest ties in their society are cognatic relationships (Hinton 1975:36), since the society of the Pwo Karen is commonly matrilineal and the mother's line is respected (Kwanchewan *ibid.*). Through my personal observation, although the traditional inheritance system has been changing to some extent due to the increasing limitation of housing space and living convenience, the matrilineal (Yos 2001:108-112) system is still being practiced in the community.

The general life of this swidden community has been heavily based on the production of rice, which means their belief system is closely related to rice farming throughout the year. The Karen people still practice the traditional ritual ceremonies for various important agricultural products, except for cabbage (my interview), to ask for aid from the spirit governing all natural resources around the Pwo Karen world before and during the farming season. However, the primary principles, major rituals and religious prohibitions which underlay the observance of worshipping the spirit, are exclusively of the original intention for the communal moral control the failure of which is believed to adversely affect their harvest and daily life, but not for the protection of natural resources from exploitation. In this context, the natural resource protection is the by-product outcomes, but not the immediate aim of the observance of the spirit-worship.

“The Lord of the Land and Water (*Thing kha chae khang kha chae*)” (Hinton 1975:41), “The Spirit of the Area (*thi kho chae kang kho chae*)” (Somphob 1986:169), or “Guardian spirit (*kue chae*)” (Kwanchewan 1988:91), is regarded as the most authoritative male spirit for the community, and gives the villagers prosperity for right

deeds and punishment for wrongdoings. Large feasts are held twice a year to enlist his help in the production of abundant crops (Somphob 1986:169). One feast is called *aang lae khaw*, which is celebrated in the monsoon season. The other is *cheeng sang kuu* (The New Year Ceremony) observed at the end of the annual agricultural cycle after the harvest (*ibid.*). This spirit is believed to be offended by wrong-doings classified as immoral activity such as pre-marital intercourse, stealing, killing, divorce, adultery and suicide (interview with the villagers on January 24<sup>th</sup> 2003). Somphob (1986:170) reports as follows for the system of their belief and procedure of ritual ceremony for the new year;

Whenever infringements occur the spirit must be pacified with very elaborate offerings. If the spirit is not satisfied crops and human lives are placed at risk. The *sjae cheng khu*, or religious leader who acts as the village intermediary with this spirit, presides over all rites held to appease him. Whenever a ceremony is held each household is expected to provide an offering.

(Somphob 1986:170)

During one of my fieldworks, the New Year Ceremony was held from January 27<sup>th</sup> to 30<sup>th</sup> in 2003 for four days, under the conduct of the traditional religious village headman (*chia kei khu*). On the first day of the ceremony, on January 27<sup>th</sup> 2003, the villagers offered a buffalo to the spirit by paying 16,200 baht. There were some immoral incidents such as a pre marital-pregnancy which resulted in a stillbirth. This is one of the most prohibited offences among the villagers. In such cases, the villagers have to appease the spirit with the most elaborate feast by using the most valuable offering, buffalo. The concerned female paid 3,000 baht for the offence, and the rest of the cost of the buffalo was shared by the other violators in the year and other villagers. After the completion of the offering, the villagers received the buffalo meat and brought it back to their house to make *Lâap Dip*, ‘minced raw meat’ which is one of the local delicacies of northern Thailand.

There is an interesting ritual law concerning this kind of ceremony. That is, until the ceremony finishes, the village females and all of outsiders are strictly banned from both observing and entering into the ritual sacred area in which the religious leader and

other males carry out the rite. If infringement occurs by those unfavourable persons, they must be fined with the same price of the offerings, and the ritual must be conducted again from the inception (interview with the villagers on January 27<sup>th</sup> 2003). They say that the infringement by females and outsiders brings about the misfortune and crisis of crops, because the spirit rejects the feast (interview with Mr. Niw on January 27<sup>th</sup> 2003).

Traditional beliefs are still strong among the villagers, though the public school education and welfare service activities for health management have been formally introduced into the village of Ban Mae Chang. There are several other beliefs they follow, which are related to their cosmology. Among them is to show respect to the spirit of the ancestors, houses, mountains, streams, rice fields, forests, and paths and routes along which they travel (Kwanchewan 1988:91, and interview in August 2002). For their health management, adult villagers generally have their own medical knowledge about the utilization of local medicinal herbs, although it is more difficult for them to find the rich variety of herbs than before (interview on March 22<sup>nd</sup> 2003). Almost every event, especially something with negative connotations, including disease, tends to be attributed to unfavourable spiritual effects. In case any family member gets sick, the head of the household holds the primary rite to appease the spirit. The above-mentioned female spiritual head, *ther mue khae khu*, holds the more ceremonial rite than the primary one with offerings of pig, chicken, rice and liquor for the sake of the patient in the lineage members.

Concerning their belief in Buddhism<sup>16</sup>, although they seem to have originally followed animistic beliefs, the Pwo Karen people in Mae Sariang district have occasionally participated in the Buddhist practices and ceremonies held by the Lua and Shan people who are their intimate neighbours (Kwanchewan 1988:80-81). Some of the villagers in Ban Mae Chang and Ban Dong were the main followers of the “*Khruba Khao Pi* (White Monk) movement” in northern Thailand which took place during the 1970s, and settled themselves at Wat Phra Phuttabat Pha Nam in Li district of Lamphun province (Kwanchewan 1988:3-4) which is around 210 km away from their home

---

<sup>16</sup> The Karen in northern Thailand are familiar with Lanna Buddhism.



villages.

### 3.3.2 Economic Activities: Analysis of Income-class Differences

#### 3.3.2.1 Definition of Income Classes: Four-group and Two-group Classifications

To the analysis of income-class differences, I apply two kinds of classification frameworks as shown in Table 3.1. One is the four-group classification in which the households are divided into four cash-income (*Baht/year*) groups; rich ( $20,000 \leq \bullet$ ), well-to-do ( $10,000 \leq \bullet < 20,000$ ), middle ( $4,000 \leq \bullet < 10,000$ ) and poor ( $\bullet < 4,000$ ) income classes. The other is the two-group classification; upper income class (as the aggregation of rich well-to-do classes) and lower income class (as the aggregation of middle and poor classes).

#### 3.3.2.2 Ban Mae Chang

##### *Agricultural Activities: General View*

The present-day life of the villagers in Ban Mae Chang basically rely on dry rice farming as in the old days. Each household has, under collective rights of villagers, the usufruct of the swidden (*Rai*), which are usually located on the sloping mountain side at a some distance away from the residential area of the village. The swidden has been traditionally utilised mainly as dry-rice farmland during the rainy season with occasional use for *catch* crops. Some households, however, have already converted it into the swidden for cabbage production (*i.e.*, cabbage farmland) during the rainy season, or into the irrigated terrace (*Naa*) for wet-rice production during the rainy season and for sporadic cabbage production during the dry season. In Ban Mae Chang, the average household annually operates approximately four or five *rai* of swidden for dry-rice production for their own consumption (interview).

In the village there are 22 households which own the irrigated terrace to grow wet rice as a supplementary food. On the other hand, some households embarked on the cabbage cultivation around a decade ago. The number of the households which grow

cabbage in 2001 was about 10, though the number is changeable year by year depending on the market price of the cabbage. In 2002, this number increased to over 20 because of the availability of the government loan of one million Baht per-village through the “Village Fund” project for 2002 (interview).

### ***Aggregated Households and Rich Income Class***

Table 3.2 shows the per-household figures by income class for Ban Mae Chang. The figures include; (1) cash income from agricultural products and labourer works, (2) landholding size of *Rai* and *Naa*, (3) *Rai/Naa*-ratio defined as the area of *Rai* divided by that of *Naa*, (4) 2002 rice-yield from dry-rice farmland and irrigated terrace, and (5) crude rice-productivity defined as the rice-yield divided by the total landholding size (*i.e.*, the sum of *Rai* and *Naa*). From this table, we know that the per-household figures for the aggregated group of all the 51 households are; 9,819 baht for income, 27.39 *rai* and 2.00 *rai* for landholding size of *Rai* and *Naa* respectively, 13.70 for *Rai/Naa*-ratio, 118.45 *thang* for rice yield in 2002 and 4.03 *thang/rai* for crude rice-productivity. As to the total-household figures, we have 500,000 baht for the income of the whole village, 1,397 *rai* and 102 *rai* for the landholding of *Rai* and *Naa* in the whole village respectively, and 6,041 *thang* for 2002 rice yield of the whole village. Meanwhile, the maximum annual income (from all income sources) among all households is 54,000 baht, while the minimum is 500 baht.

If we look at the rich class, which consists of eight households, the per-household figures are larger than any other income class for the size of *Naa*, rice yield in 2002 and crude rice-productivity, while the *Rai/Naa*-ratio and sum of the sizes of *Rai* and *Naa* are both the lowest among all income classes.

Turning our attention to what have made the households of this rich income class rich, we can list up at least the following elements to answer this question; (1) to serve for “official work”<sup>17</sup>, (2) to engage in the regular “cabbage cultivation”<sup>18</sup>, and (3) to own

<sup>17</sup> Five households (62.5%) of the eight households in the rich class obtained the monthly salary from the government.

<sup>18</sup> Seven households (87.5%) of the eight households engaged in the cabbage cultivation during the rainy

irrigated terrace<sup>19</sup> .<sup>20</sup>

Element (1) means working as part time government officer. The head-person of the five households all serve for the government (one elected village headman, two elected assistants to the village headman, and two elected sub-district administrative office members). Their official works assure them monthly salaries, and if those who are rich fail to make profit in cabbage cultivation, their living can be supported by other advantageous factors such as this salary. Besides, although some of those who are rich struggle with debt, they generally have more chance to make up for loss by utilizing their privileged status. Furthermore, the three out of the five households are of the lineage of the traditional village leader, which allows them to use relatively larger and better locations for farming. Element (2) connotes a specific “transportation privilege” for the cabbage cultivation. Six out of the eight richest households hold the land close to the road near Ban Mae Kanai (see Remark [2] in Figure 3.4) from which it is more convenient and easier for them to transport their cabbage to the regional trading market at Mae Ho. Thus for them, even if the road condition is adversely affected by the heavy rain, it is less likely to be unable to transport their crops to the market, unlike the other fellow-villagers growing cabbage in the swidden in the deeper forest areas. Element (3) suggests the channel to supplement “rice sufficiency” for the swiddeners. The rice yield from the irrigated terrace is more stable than swidden, unless floods occur to affect it. Accordingly, the wet rice farming can be a good backup for their rice security when they grow cabbage in their swidden.

### ***Non-rich Income Classes***

If we look at the three non-rich income classes in Table 3.2, what is somewhat common to them is that the landholding size of *Naa* is substantially smaller than that of the rich class.<sup>21</sup> As to the difference among the non-rich classes, the middle and poor

---

season in 2002.

<sup>19</sup> Six households (75%) of the eight households own the irrigated terrace.

<sup>20</sup> For reference, the richest household in Ban Mae Chang Bon is the traditional religious leader, while the second richest household there substantially benefits from cabbage cultivation.

<sup>21</sup> The landholding sizes of *Naa* of the well-to-do, middle and poor classes are respectively 52%, 63% and

classes are nearly the same for the per-household figures appearing in columns D through G.

To the contrary, the well-to-do class is unique in the sense that, even among the all four income classes, the per-household landholding size of *Rai* is the highest (30.80 *rai*) and the per-household 2002 rice yield is the lowest (78.40 *thang*). This would perhaps imply that, as compared with the middle and poor classes, the average household of the well-to-do class applied the “higher proportion of the swidden area which was used in 2002” for the cabbage cultivation in the same year. In other words, as compared with the other non-rich classes, the average household of the well-to-do class applied “the lower proportion of the swidden used in 2002” for the production of rice in the same year, to result in pushing the per-household rice yield down to the lowest among the all income classes.

Setting besides the above interpretations obtained through Table 3.2, if we turn our attention to the hearing information which I got in my field survey conducted from time to time during the period of 2002-2003, all of the households belonging to the three non-rich classes were more or less involved in the labourer works to earn cash income. Cabbage cultivation has been applied by the majority of the well-to-do class, but hardly by the middle and poor classes in Ban Mae Chang. The nine out of 10 households in the well-to-do class grew cabbage in the 2002 rainy season, while only two households in the middle class and one household in the poor class attempted to grow cabbage in the same season. Nonetheless, this active involvement in the cabbage cultivation by the villagers would have not taken place without the availability of the loan from the Village Fund 2002, especially for the households in the middle and poor classes since the cabbage cultivation has been, in general, considered as a privilege only for the households of the rich income class in Ban Mae Chang. It has been rather difficult for the non-rich income-class villagers to grow cabbage unless they are invested in from outside the village.

Among the villagers in the well-to-do class who grow cabbage in 2002, some of them feel that their livelihood in terms of cash-income, has been improved even on the

---

72% of that of the rich class.

fragile balance of repeated debts and benefits though almost all of them in this class have to do more intensive labourer work in order to compensate for their debt from previous cabbage cultivation and to meet their need for cash to buy rice. This tendency is exemplified by the fact that one family in the well-to-do class has already stopped growing dry rice, relying on only cabbage cultivation and labourer work. This family has to, of course, purchase their daily rice. On this point, only one household in the well-to-do class owns irrigated terrace, which can provide it with more rice per unit area of it than the swidden unless it is awfully affected by floods due to the long rainfall which brings about almost no rice yield.

Interestingly enough, the per-household landholding of irrigated terrace and rice yield of the middle and poor classes are both higher than those of the well-to-do classes. Besides, the livestock such as cattle and buffalo is another important income resource held more by the middle and poor classes than the well-to-do class. In the case of rice shortage, they sell their livestock at the price of around 4,000-5,000 baht per cattle and 5,000-6,000 baht per buffalo.<sup>22</sup> Those who cannot afford to raise it, have to go to work regularly outside the village as labourers to make money during the dry season.

### 3.3.2.3 Ban Dong Luang<sup>23</sup>

#### *Agricultural Activities: General View*

In Ban Dong Luang at present, each household holds about two or three farming plots of swidden to grow only dry rice, or both rice and cabbage in turn year by year. Their land, both swidden and irrigated terrace, has been in general seriously degrading year by year due to continuous population growth, increasing overuse of farmland, rising difficulty to open new farmland, and use of chemical fertilizers. There are 14 households out of the total 63 households own the irrigated terrace. Some of them grow only wet rice those but no dry rice at all for their consumption in parallel with cabbage cultivation in their swidden nearly every year. In this village, the majority of the households engage

<sup>22</sup> This is also applied to the case when they have to return their rice loan.

<sup>23</sup> This information of the agricultural situation in Ban Dong Luang in this section was obtained in August, December 2002 and January 2003 through the interview to every household in my fieldwork.



in cabbage cultivation.<sup>24</sup> Among these households, some are rotating the dry rice production in one year and cabbage production in the following year at the same farming plot, some are involved in cabbage cropping as labourers, through they have their own cabbage fields, looking for the chance to grow cabbage by themselves someday in future; some are the fatherless or aged households which are unable to grow cabbages.

### ***Aggregated Households***

Table 3.3 shows the per-household figures by income class for Ban Dong Luang about the same item as provided by Table 3.2 except the item of cash income. The cash income in this table indicates the cash income accruing only from cabbage cultivation excluding the cash income from other income sources like labourer works. Therefore, Table 3.3 is incomparable with Table 3.2 when we try to compare the straightforward absolute income levels between the villages of Ban Mae Chang and Ban Dong Luang. But the two tables can be comparable with each other when we compare the “intra-village comparison through relative income level” between the two villages.

From Table 3.3, we know the following per-household figures for the aggregated group of all the 63 households: 9,523 baht for income, 9.06 *rai* and 0.79 *rai* for landholding sizes of *Rai* and *Naa* respectively, 11.47 for *Rai/Naa*-ratio, 130.00 *thang* for rice yield and 13.19 *thang/rai* for crude rice-productivity. The following can be pointed out by comparing the two villages; (1) the per-household sizes of *Rai* and *Naa* in Ban Dong Luang are respectively about one third and two fifths of Ban Mae Chang, (2) the *Rai/Naa*-ratio for Ban Dong Luang is less than that for Ban Mae Chang by around 15%, (3) the per-household rice yield of Ban Dong Luang exceeds that of Ban Mae Chang by 10%, and (4) the per-household crude rice-productivity in Ban Dong Luang is more than three times as much as that of Ban Mae Chang. Judging from the above points (1) and (3) under a set of provisional assumptions<sup>25</sup>, it can be roughly estimated that the fallow

<sup>24</sup> 13 households which did not grow cabbage in 2002.

<sup>25</sup> A set of assumptions adopted here are as following; (1) the net rice-productivity per unit area of swidden is approximately the same between Ban Mae Chang and Ban Dong Luang (in the rainy season), and so is for the net rice-productivity of irrigated terrace (in the dry season), (2) the net cabbage-productivity per unit area of swidden is approximately the same between Ban Mae Chang and Ban Dong Luang (in the

period of the swidden in Ban Dong Luang is shorter than that in Ban Mae Chang.

As to the total figures, we have; 600,000 baht for the income of the whole village, 571 *rai* and 50 *rai* respectively for *Rai* and *Naa* in the whole village, and 8,190 *thang* for the 2002 rice yield of the whole village. Meanwhile, the maximum annual income (accruing from cabbage) among the whole households is 50,000 baht and the minimum 0.0 baht. It should be noted that the household with the income of 0.0 baht would not necessarily indicate that the family members of this household live in dire poverty. Rather, it is highly possible that the household earns its income through the labourers.

### ***Upper Income vs. Lower Income Classes***

It is noteworthy that the majority of the rich income class<sup>26</sup> (five households from nine of the rich class) and about one third of the well-to-do class (five households from 17 of the well-to-do class) own the irrigated terrace to grow wet rice to supplement for dry rice. Three households in the upper income class<sup>27</sup> of this village have already turned the dry-rice farming in swidden into wet-rice farming in irrigated terrace to use their swidden exclusively for cabbage production. In any case, however, their agricultural production has been absolutely dependent on chemical inputs resulting in that more chemicals have to be put into the soil year by year.

The majority of the households in the lower class which were late to start cabbage cultivation, can neither afford to grow cabbage annually nor take advantage of

---

rainy season), and so is for the net cabbage-productivity of irrigated terrace (in the dry season), and (3) the amount of cabbage production of Ban Dong Luang is considerably larger than that of Ban Mae Chang. Here, the “net rice productivity” means “the amount of rice product divided by the area of farmland actually used for rice production, excluding the land used for cabbage production and for fallow.” The net cabbage productivity is also similarly defined. As a matter of fact, the three assumptions adopted for the estimation here may not be so unreasonable in light of my field surveys in both villages.

<sup>26</sup> The nine households of the rich income class in Ban Dong Luang, are the first group to have launched cabbage cultivation in the 1980s. All households in rich and well-to-do classes have continued to grow cabbage annually on their swidden. Moreover, for those who own the irrigated terrace installed with watering systems in swidden such as sprinklers, it is possible for them to grow cabbage biannually in both dry and rainy seasons. Meanwhile, though I have not heard in my interview about such intensive cabbage farming in Ban Dong Noi (satellite village of Ban Dong Luang) as in Ban Dong Luang, there is at least one farmer from Ban Dong Noi who has been conducting the biannual cabbage cultivation in the irrigated terraced nearby Ban Mae Chang by use of sprinklers.

<sup>27</sup> See Table 3.3 for the upper-income and lower-income classification.

technological innovation in the agricultural transformation like the upper income class can. Since the market price of cabbage has been drastically fluctuating, they sometimes get loss from cabbage cultivation to fall into heavy debt. Moreover, under the condition of limited landholding size of *Rai* and *Naa* by the lower-income households, the soil of their farmland has been continuously degraded by intensive land use for regular production of dry rice and occasional cabbage production in turn by year. The per-household terrace-holding of these lower-income households is significantly low as compared with the upper-class households in Ban Dong Luang or the lower-class households in Ban Mae Chang. Thus, their rice sufficiency tends not to be enough, and hence, they need to work as labourers to buy rice, mostly in the outside villages or for other fellow-villages with larger cabbage fields who have been successful in cabbage productions in Ban Dong Luang, and who can afford to hire labourers from inside and outside the village.

### **3.3.3 Labour Job Opportunities Created by Cabbage Cultivation: Inter-and-intra Ethnic Relationships**

#### ***Wage Labour; Outside and Inside the Village***

The villagers' desire for wage labour outside the village mainly emerges in time of rice shortage, urgent need for cash expenditures, or for repayment of debt. It is usually the premarital male's role to work as labourers outside the village, because the married men need to devote themselves to rice and/or cabbage farming in the village with their family members (Grandstaff 1980:11, and interview). It is rare for the female villagers in Ban Mae Chang to work in the town, except for the younger generation under thirty who have Thai literacy. There is a study about the new movement among the Karen female youth to enter into urban work by marrying with the northern Thai males, in the diffusion process of formal education and commercialized economy in northern Thailand (Hayami 2000:267). It is said that the young females are usually diligent in sending money to their parents in the village from the town (interview), while the male bachelors tend to spend the money mostly for their use (Hinton 1975:154).

There are two young females I know; one is a teen-age girl from Ban Mae Chang and the other is an adult female in her twenties from Ban Dong Luang and both are working outside of the village as a regular worker and a seasonal worker respectively.<sup>28</sup> The first one is a 17-year old girl from a fatherless family who have just started working at a laundry in Chiang Mai after graduation from junior high school in the village in 2002. Her school teacher tried to find the laundry job for her because she has to support her mother and one younger brother. Her working time is from 7 a.m. until 21 p.m., with a short break for lunch. Through such a hard job which requires almost everyday-work at the laundry, she gets 2,000 baht per month. Another person is a 21-year old female working at a guesthouse in Mae Sariang. Her father found for her the job since he has known the owner of the guesthouse. She worked as a room cleaner, receptionist at the counter, and does other odd jobs at the guesthouse. She received around 1,000 baht per month. In these two cases, they could stay at the work place for free with everyday meals under a contract with the employers. Both females have to go back to help their family for farming rice, in rainy season and in other busy occasions for agriculture in their home villages. As in the case of the above-mentioned two Karen females, it is convenient for the employer to hire ethnic female highlanders because usually they pay less money to them than to lowlanders. The highlanders as employees, however, have no power to bargain for more money and better treatment. They have to patiently try to make a living in the town areas under their relatively disadvantaged status with respect to their salary.

For male villagers, there are frequent opportunities to go to work outside the village on a daily or a-few-days basis. The average wage for the male villagers working in the urban area is 100-150 baht per day, in case they temporarily stay in the urban area to engage in the construction work of roads or buildings, or the work of painting woodcraft. The sites of such labour work for them are usually located in the cities of Mae Sariang, Mae Hong Song, Lamphun, Lampan, Chiang Rai, or Chiang Mai. At the job site, the Pwo Karen villagers work with the highlanders of the Skaw Karen, Hmong and Lua as well as the lowlanders in northern Thailand. In Ban Mae Chang, there are

---

<sup>28</sup> All information about labour conditions in this paragraph is based on the interviews and observation

about ten people outside the village who are now working on a weekly, monthly, or seasonal basis. One of the male informants in Ban Mae Chang has reported to me that, at the working place, they are generally treated in the same way as the other labourers and are paid the same wage as them.

Among the youths in their twentieth in Ban Dong Luang, there are at least ten people working in the town like the aforementioned lady. Most of them usually come back to the village during the busiest season in agriculture, which is the rainy season, to help their family grow rice or cabbage.

Inside the village, they have usually the chance to get wages by working in the cabbage field from the start of cabbage cultivation season. While dry rice farming is conducted by individual households, cabbage cultivation and sometimes irrigated rice cultivation require labour work from outside the households. The daily wage-rate inside the villages is 50 baht for working in the cabbage fields. Before some villagers in Ban Mae Chang started to grow cabbage on their land about fifteen years ago, the youth were sometimes hired as daily labourer for the cabbage cultivation conducted by one of the highland group people, Hmong, who are most famous among the ethnic minority groups in the region for having brought pioneering several kinds of cash cropping. At any rate in general, the cash crop cultivation generates labour-work opportunities for the villagers who have to get cash by working as labourers, although the owners of the cabbage fields in Ban Mae Chang usually prefer offering the job to their relatives with the highest order of priority.

#### ***Context of Land Scarcity: Ban Mae Chang's Experience with the Skaw Karen People***

The villagers in Ban Mae Chang say that their fallow period used to be over 10 years around four decades ago. They presently leave their land fallow for around four to five years, which is approximately a half of the previous length and which is not enough long for maintaining good soil quality. The long-term shortening of the fallow period has adversely affected the rice productivity per unit area of land in Ban Mae Chang. It has

---

performed during my fieldwork in January 2003.



resulted in more than two third<sup>29</sup> of the households in this village now needing to buy rice from either the neighbouring Skaw Karen village (Ban Mae Kanai), or from the town areas of Mae Ho or Mae Sariang.

There are several major factors that have induced the shortening of the fallow period for the Ban Mae Chang villagers. One of them<sup>30</sup> is the long-term decrease in per-household arable land caused by the immigration of the Skaw Karen people into Ban Mae Chang's territory to have formed their own village Ban Mae Kanai (interview with the villagers of Ban Mae Chang in January 2003).

Ban Mae Kanai is the sole Skaw Karen village in the neighbourhood of the research site of this thesis, and is located to the north of Ban Mae Chang. It came to existence about eighty years ago.<sup>31</sup> At first, four families came from the present location near Mae Ho. Later on, the village has grown up to 53 households in 2003. From their village, it takes twenty minutes to go to Mae Ho by car. Despite of such a convenient factor for cabbage transportation from this Skaw Karen village, and despite of its higher altitude around 1,050-1,070 m which is favourable to cabbage cultivation in terms of climate, only four or five households from this village were engaged in cabbage cultivation in 2002 since the soil is too poor<sup>32</sup> to grow cash crops and since it needs the input of sand and chemical fertilizers.

They mainly grow rice and chilli for their own consumption, and sometimes sell them if they have surplus. In the case of a family at which I interviewed with a man in his sixties, this household possesses 7 to 8 *rai* of swidden per plot for annual use, rotating the annual-use farming field over 10 plots with the fallow period of 10 years. The rice yield of his family in 2002 was 100 *thang*, which was not sufficient for his four-person family. According to him, such land-utilization pattern and rice-shortage situation are typical pattern of land use for the average household in his village (interview with Mr.

<sup>29</sup> See Table 4.3 for obtaining this ratio.

<sup>30</sup> Among other factors are the internal population growth, overuse of farmland, difficulty to open the new farmland and annual use of wider farmland with the aid of chemical fertilizers.

<sup>31</sup> One of the Ban Mae Chang villagers said: "Feeling pity for the landless new comers, the Ban Mae Chang villagers yielded a part of their land to the Skaw Karen."

<sup>32</sup> Several Ban Mae Chang villagers said that the soil around Ban Mae Kanai is not as fertile as in Ban Mae Chang.

Gui on January 26<sup>th</sup> 2003 in Ban Mae Kanai). For their supplement of subsistence farming, they own more livestock, as compared with Ban Mae Chang villagers, such as cattle and relied on more labour work due to their location with better transportation access to the market. Only one car is possessed in the village, which is owned by a family with a daughter who married to a Thai man in Phitsanulok province. He presented a car to his wife's parents.

### **3.4 Changing Natural Environments and Criteria for Farming**

Within the agricultural transformation in Ban Mae Chang and Ban Dong Luang, the conditions of each site and the adaptive practices implemented have implications for the surrounding natural environments and criteria for farming. Between these two Pwo Karen villages, different forms of involvement in cabbage cultivation can be observed, namely less intensive cropping in Ban Mae Chang and more intensive agricultural practices in Ban Dong Luang.

#### **3.4.1 Soil Evaluation**

Through my fieldwork, I have found that the villagers mention soil conditions first whenever they try to explain their farming sites. As Hinton (1975:82) mentions, they always spoke, at the outset, of “the nature of the soil rather than the vegetation,” and they have a complex set of categories for assessing soil characteristics, taking into account the soil's colour, texture, structure, humus and stone content. They can recognize where the fertile-soil area is and whether or not that area is suitable for rice production. They usually classify the soil into three categories; (1) red earth, which is associated with limestone outcrops; (2) black earth and (3) podsols. The latter two categories are associated with patches of laterites and granite outcrops (*ibid.*).

According to Hinton's examination, (1) the Karen people preferred to cultivate red earth ideally, (2) they also liked black soil as it is fertile, but subject to surface erosion, (3) podsols of the area were poor, but they are sometimes fond of cropping the

areas where they prevailed (*ibid.*). Actually, the Pwo Karen people utilize the soil in such a way that they attempt to enhance each characteristics of the farmland. In Ban Mae Chang, they ideally decide the site and timing to start swidden farming in the new season depending on the latest condition of the soil. However, it has become increasingly difficult for them to choose the field in a satisfactory way by means of their empirically accumulated knowledge, due to the shortened fallow period and intensive use of chemical inputs.

Since the cabbage cultivation started as a new vital crop in the swidden farmland inside the village of Ban Dong Luang, the villagers have continuously applied several kinds of chemical fertilizers for the cabbage cultivation, with levels of application increasing year by year to maintain high yields. If they discontinue applying fertilizer, or if they keep applying the same amount of fertilizer as the previous year, the soil cannot maintain the same degree of fertility. This has resulted in requiring the villagers to select suitable rice species for the *chemically fertilized* soil. This selection process has reduced the choice variation of the dry-rice species in both Ban Mae Chang and Ban Dong Luang. In the village, the upper-income class households which can afford the effective use of the new technological innovations in swiddening and which can secure the terrace farming, have enjoyed rather higher rice productivity in relatively smaller sized swiddens. The households of the middle and poor income class which still rely on the traditional methods of agriculture, cannot take advantage of the new methods, have been marginalized in the circumstances of the shrinking arable land. This gap between income classes has widened with increasing internal socio-economic differentiation, and has also caused the soil deterioration which shows the gradual threats to the soil for the farmers' own food security, especially for the lower-income households in Ban Dong Luang.

#### **3.4.2 Seed Selection**

For the farmers, the selection of the type of seeds they use is an important principle for each type of soil of their new fields (Hinton 1975:83, and interview). Thirty years ago, the Pwo Karen people used the fourteen varieties of rice species, some of

which fit better to given environments than others (*ibid.*).

In Ban Mae Chang at that time, some of the villagers were using the major seeds of four kinds of dry-rice species; *Bu Mu Po* (red rice), *Bu Ton Kue* (white rice), *Ai Yo E* (white sticky rice), and *Ai Khu Pεε* (red sticky rice). They say that these four kinds of dry-rice seeds have been selected as the most suitable and convenient for the soil condition of each farmland plot. There are other several kinds of dry rice seeds they use according to the land characteristics. Meanwhile, one of the elder villagers, who is good at terraced farming, uses three-kinds of seeds for wet-rice production. The two are normal, *Bu Mu Pan* and *Bu To Lεε*, while another one is glutinous rice used for special ceremonial occasions, *Khaw Pεε*. He claims that there used to be (or there are) thirty-three kinds of dry-rice and wet-rice species to which he has been accustomed (interview with Mr. Jan on January 21<sup>st</sup> 2003).<sup>33</sup>

In Ban Dong Luang, the 46-year old official village headman presently uses three kinds of rice seeds; *Bu Mu Po* (red rice), *Bu Ton Kue* (white rice), and *Ai Khu Pεε* (red sticky rice). When he was young, as Hinton (1975:83) reports out, there were nearly twenty kinds of rice seeds they used. The three species just mentioned above are now the most popular among the villagers since they grow faster than the other kinds. In their new swidden system mixed with cabbage cultivation, they have to manage the wise allocation of their time budget to grow two important crops simultaneously. Besides, if they happen to be late in taking care of rice due to the simultaneous work, the cattle and buffalo would eat them (interview with the farmers in Ban Dong Luang). The recent important practice for the upper income villagers is to select more high-productive and fast-farming methods than before due to the busier farming caused by the dual farming<sup>34</sup>.

### 3.4.3 Utilization of Non-timber Forest Products

<sup>33</sup> It is not clear whether he meant the present condition of rice varieties or past condition in my interview. It is however possible to validate this information by referring to the study by Gravers (2001:80). He notes that the Pwo Karen would select different types of rice including sticky rice, and that the elder Karens know the names of 300 to 400 plants used for food, medicine, dying, arrow poison and other numerous purposes.

<sup>34</sup> The simultaneous farming of rice and cabbage production.

Forest in the region of the Pwo Karen people once existed on a large scale in such a way that they could cut and burn a number of big trees to produce high quality ash to fertilize their swidden. An old man in Ban Mae Chang recalls that they used to rotate around 20 places in their swidden so that many trees could grow enough to offer them good ash to make rich soil. At the present time, however, they rotate the swidden in the period of two-to-three or five-to-six years, thus there are few large trees grown during such a short fallow period, and the soil has become leaner year by year. The forest situation in Ban Mae Chang is still richer than in other nearby Pwo Karen villages such as Ban Dong Luang though. The Pwo Karen people in the region recognize that there are still prolific forests and soil in Ban Mae Chang, and therefore the outside villagers from, for example, Ban Dong Luang and Ban Huai Pla Kang often ask for wood or bamboo from the territory of Ban Mae Chang.

The small wild animals and other forest products are primarily for the villagers' daily consumption, and have gradually become more and more scarce. The Pwo Karen people state that the noticeable decline in the number of indigenous animals in and around their territories started after the latter half of the 1950s (Hinton 1975:126). In the old days, there were such larger wild animals as tigers, elephants and larger deer around the Pwo Karen community. The tiger, which nowadays seems to have become extinct in the region, was an existing awful animal until four or five decades ago (interview with Mr. Pit in January 2003). Gravers (2001:60) reports that "nature would punish an adulterer by letting the tiger bite them." This reflects that the Pwo Karen have a strong moral fear of adultery and incest. The similar attitude can be found in their folktales collected in Ban Dong Luang by E. Hinton, in which the 'tiger' appears to bite, kill and eat the people, in many cases, under the context of immoral relationships between a young girl and a boy (Hinton, E. 1999). Although those wild animals had been already almost extinct four or five decades, it is reported that there were several wild animals such as barking deer, sambar, Himalayan bear, badger, loris and feral pig during Hinton's research time at the end of 1960s (Hinton 1975:126-127). These animals have been further more eliminated afterwards. Right now, even smaller species of wild animals



have also become difficult to find.

Wild rats from the forest are now the important sources of daily protein for the villagers. During the dry season, they often go to the forest, normally every three days, with rap-traps made of bamboo. In Ban Mae Chang including its satellite village, Ban Mae Chang Bon, it has become difficult for the villagers to get even small animals like rats from the forest. According to the villagers, there are presently too many residents looking for animals in their relatively small forest. Consequently, the stock of the animals in the forest has become scarce. Over thirty or forty years ago, there were plenty of large wild creatures much more than human beings in number, therefore they frequently encountered wild deer and other big animals (interview with Mr. Pit).

Changing the topic from the fauna to flora of the region, bamboo has been playing an important role in the life of the Pwo Karen people. Bamboo can be used for many purposes by the villagers, such as for housing (floors and walls), eating, cooking and farming. The Pwo Karen people can identify twelve different kinds of bamboos and specific purpose for the use of each of them (Hinton 1975:128-129). Presently, the bamboos are still widely utilized in the same way as Hinton's time. Though bamboo was an ubiquitous plant when Hinton did his fieldwork (*ibid.*), the decrease in the rich forests must have been adversely affecting the bamboo species too.

The name of Ban Dong Luang originally means "Great Forest." The territory of this village which is estimated by the official village headman, is approximately 5,000 *rai*, including residential areas and community forest area. In its vicinity, there is a mountain named *Don Long Jon* (Doi Dong Luang) the peak of which is 1,253 meters above sea level. The community forest is located surrounding the Mt. *Don Long Jon* which extends about 500 *rai* (interview with the official village headman on August 16<sup>th</sup> 2002). The villagers can collect and utilize the forest-products from the community forest area, but other areas of the forest area are no longer efficiently available to them due to the intensive exhaustion. Where is the "Great Forest" now? Actually far from the residential area of Ban Dong Luang, there still exist relatively rich forest resources. However, on the plateau of Ban Dong Luang, there hardly exists the deep forest around

its residential area, which is contrastive to the fact that the woods that can be seen in the village are the woods of big wooden houses in the residential area. The villagers of Ban Dong Luang presently have to buy wood, or sometimes have to violate the law to cut trees inside the territory of Ban Mae Chang in order to satisfy their demand (interviewed in Ban Mae Chang).

#### 3.4.4 Scale of Livestock Farming

In my field survey during February to March of 2002, there were 14 buffalos kept by two households, 38 cattle by six households, and approximately 10 pigs and 60 chickens in Ban Mae Chang.<sup>35</sup> During the following rainy season, many livestock including almost all chickens and some pigs in the village, were killed by epidemics. They held rites in the middle of December to purify the evil spirits, after which some villagers got new livestock again. As of January 2003, the villagers were keeping inside their residential area 16 buffalos, 26 cattle, 29 pigs and over 10 chickens in total.

In Ban Mae Chang, buffalos, which are the most valuable livestock in the village, were regularly kept by the same two households, while sometimes they were kept by another household during my fieldwork from February 2000 through March 2003. The two regular buffalo owners lost all of their buffalos by the above-mentioned epidemic, and regained new ones. Cattle are the second most valuable livestock, and raised by five households in February 2002, and by six households in January 2003. One of the cattle holders who had kept raising around 25 cattle for ten years, sold five cattle for 15,000 baht two years ago to buy two places of terraced field (total area of 14 *rai*). Pigs and chickens are often used as sacrifice to the spirits in their ritual ceremonies when the villagers get sick. They are also for domestic consumption, and for sale when the request comes. Some of the regular cattle holders utilized the Village Fund loan in 2002 to purchase cattle. One of the middle-income class villagers who regularly raises cattle newly got three cattle for 10,000 baht and nine pigs for 10,000 baht by use of the 20,000 baht-loan from the Village Fund in 2002. He had already sold out six pigs when I

---

<sup>35</sup> More precisely, the mother village of Ban Mae Chang.

interviewed with him (surveyed in January 2003).

To the villagers of Ban Mae Chang, the raising of livestock seems to be not as popular as with the villagers of Ban Dong Luang and Ban Mae Kanai, where a number of cattle are kept exclusively for their household consumption. This would be one of the major reasons why there is not so much damage by encroachment of buffalos and cattle on the crops of swidden in Ban Mae Chang (interviewed with villagers in Ban Dong Luang).

In Ban Dong Luang, according to Hinton (1975:130), in the 1960s there were one elephant, 17 buffalos, 83 cattle and such smaller livestock as pigs and chickens. In my field research, the Ban Dong Luang villagers reported me that they were holding 102 cattle, over 90 pigs and 377 chickens in total (surveyed in December 2002).

Livestock such as pigs and chickens are generally raised for ritual purposes. The villagers frequently use chickens and pigs for the ceremonies to offer them to the spirits. Chicken eggs are rarely consumed by the villagers. Hinton (1975:131) reports that different types of chickens and pigs (ages, sex, or colour) are required for each kind of ritual ceremony. If the sacrificed animals are not the correct type of offerings for the ceremony, they will not be accepted by the spirits. After the ceremony, the villagers attending to the ceremony can eat the rest of the meat with their family members and relatives. The Pwo Karen people tend to hold rituals for almost any kind of problems. As a result, the total amount of the actual consumption of chickens and pigs by the villagers is remarkably large. This religious practice is held for the sake of asking the spirits to help the Pwo Karen themselves. At the same time, apart from this formal purpose, the ritual ceremony also functions for providing villagers with a good opportunity through which they can enjoy the highly nutritious foods eating the "sacrificed leftover" from the ceremony.

Usually the big livestock such as cattle and buffalos are not used as offerings. However, as I have observed the new year ceremony in January in 2003, if such grave misfortune or egregious moral offences committed, they have to sacrifice a specific amount of cattle or buffalos according to the its magnitude of seriousness under the

regulation<sup>36</sup>. Normally, cattle and buffalos are grazed in and around the territory of the village. The excretions of these big animals enhance the soil quality significantly in the swidden system. However, the existence of these big domestic animals are sometimes troublesome for the farming in Ban Dong Luang where it was always one of villagers' important concerns how to prevent cattle from eating their crops. The high density of domestic animal stocks in Ban Dong Luang, which has been promoted by the upper-income class households which can afford more livestock than the lower-income class households, is one of the paradoxical outcomes resulting from the introduction of cash cropping which has been also initiated by the upper-income class households.<sup>37</sup>

### 3.5 Summary

The main points of what has been discussed in this chapter, are itemizedly synthesised as following.

- (1) There are six Pwo Karen villages and one Skaw Karen village in the mountain area in and around the research site of this thesis. The Pwo Karen villages are Ban Mae Chang, Ban Dong Ku, Ban Dong Luang, Ban Huai Pla Kang, Ban Khun Wong Tai and Ban Khun Wong Nua, while the Skaw Karen village is Ban Mae Kanai.
- (2) Ban Mae Chang is said to have been formed over 200-250 years ago by immigrants to the present location originating from Burma perhaps via one or two intermediate villages in Thailand. Ban Dong Luang is a settlement which has split off from Ban Mae Chang over 100 years ago.
- (3) The shortening fallow period does not necessarily result only from the intervention of public forestry policies, but also from such factors as population growth in the village, decrease in the soil quality caused by the overuse of farmland, and the

<sup>36</sup> For more detail, see section 3.3.1 subtitled as "Social Institutions: Village Administration, Marriage and Belief" in CHAPTER III.

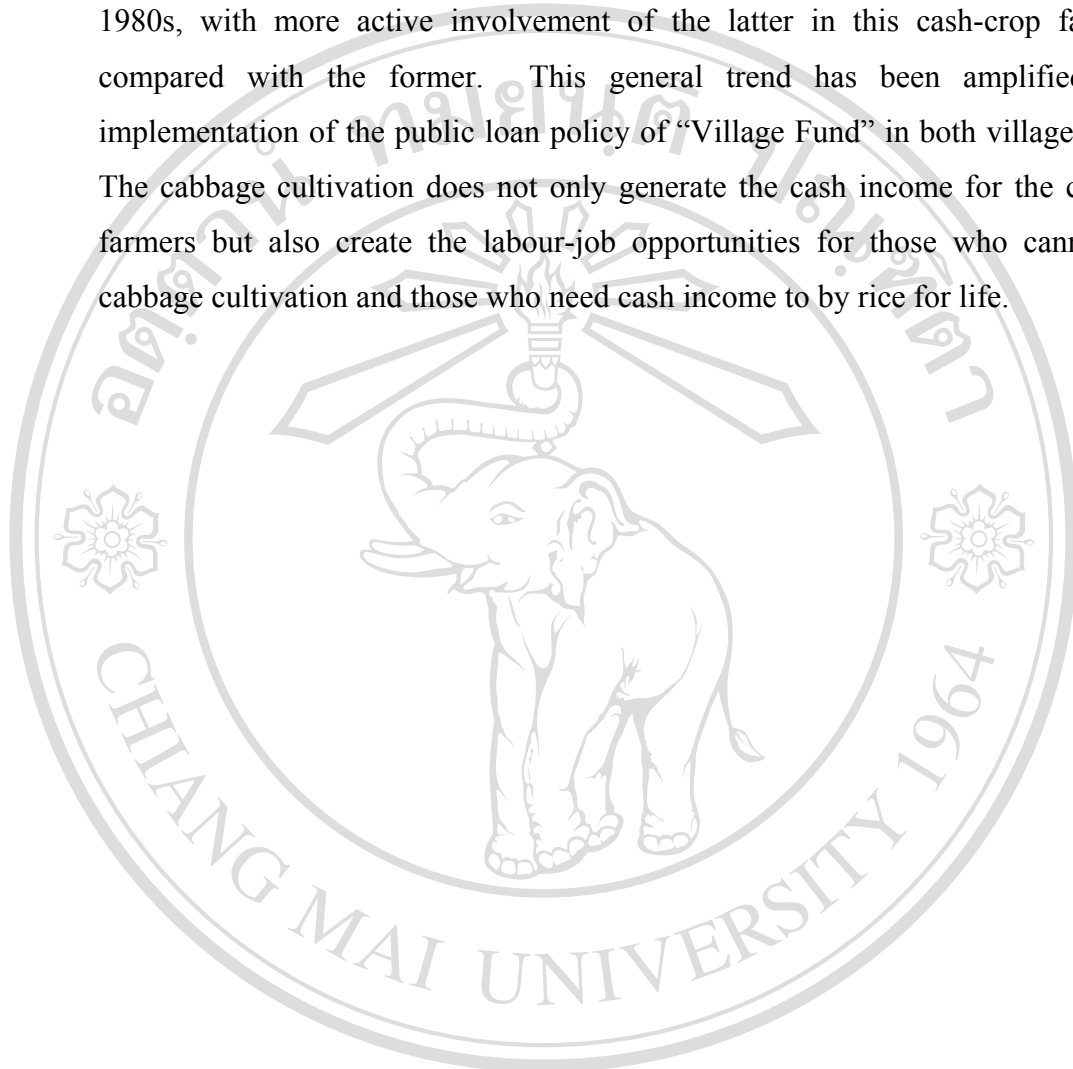
<sup>37</sup> This paradoxical relationship can be presented by the following chart diagram: (1) Increase in cash cropping promoted by the upper-income class households → (2) Increase in domestic animals promoted by the upper-income class households for economic security → (3) Increase in the encroachment of buffalos and cattle on the cash crops in the swidden.

demand for larger area of farmland to be used every year for the cabbage production which has become possible partially by the aid of chemical fertilizers.

- (4) In the case of Ban Mae Kanai which is the Skaw Karen village, though the village is located closer to the regional cabbage trading market at Mae Ho and is situated at the high altitude of around 1,050-1,070 m which provides favourable climate conditions for the cabbage cultivation, these environment do not necessarily motivate the villagers to grow cabbage in their swidden. The Pwo Karen villagers in Ban Dong Luang are more active in growing cabbage than Ban Mae Kanai villagers despite that Ban Dong Luang is located much further distant away on the dirt road from Mae Ho than Ban Mae Kanai.
- (5) The implementation of the public loan policy of “Village Fund 2002” brought about significant influence upon the villagers in both Ban Mae Chang and Ban Dong Luang to encourage them to furthermore conduct the production of cabbage. With this loan, from this Fund, some villagers were quite successful in obtaining good gains from cabbage production, while some suffered from considerable losses.
- (6) The official administrative scheme of the village consists of “one elected official village headman” and “two elected assistants to the headman” as well as “two elected sub-district administrative office (*O.Bo.To*) members.” In Parallel, there is a traditional religious village headman (*chia kei khu*).
- (7) The per-household figures for the village of Ban Mae Chang show: 27.39 *rai* and 2.00 *rai* for landholding sizes of *Rai* (swidden) and *Naa* (irrigated terrace) respectively, and 118.45 *thang* for the rice yield in 2002. The aggregated figures for the whole village are: 1,397 *rai* and 102 *rai* respectively for the landholding sizes of *Rai* and *Naa*, and 6,041 *thang* for the rice yield in 2002. The per-household figures for the village of Ban Dong Luang show: 9.06 *rai* and 0.79 *rai* for landholding sizes of *Rai* and *Naa* respectively, and 130.00 *thang* for the rice yield in 2002. The aggregated figures for the whole village are: 571 *rai* and 50 *rai* respectively for *Rai* and *Naa*, and 8,190 *thang* for the rice yield in 2002.
- (8) In the village agriculture, the importance of cabbage cultivation has been significantly



increasing in both Ban Mae Chang and Ban Dong Luang since the middle of the 1980s, with more active involvement of the latter in this cash-crop farming as compared with the former. This general trend has been amplified by the implementation of the public loan policy of “Village Fund” in both villages in 2002. The cabbage cultivation does not only generate the cash income for the cultivating farmers but also create the labour-job opportunities for those who cannot afford cabbage cultivation and those who need cash income to buy rice for life.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright © by Chiang Mai University  
All rights reserved

**Figure 3.1 Location of the Villages of Ban Mae Chang and Ban Dong Luang and Their Surrounding Area**

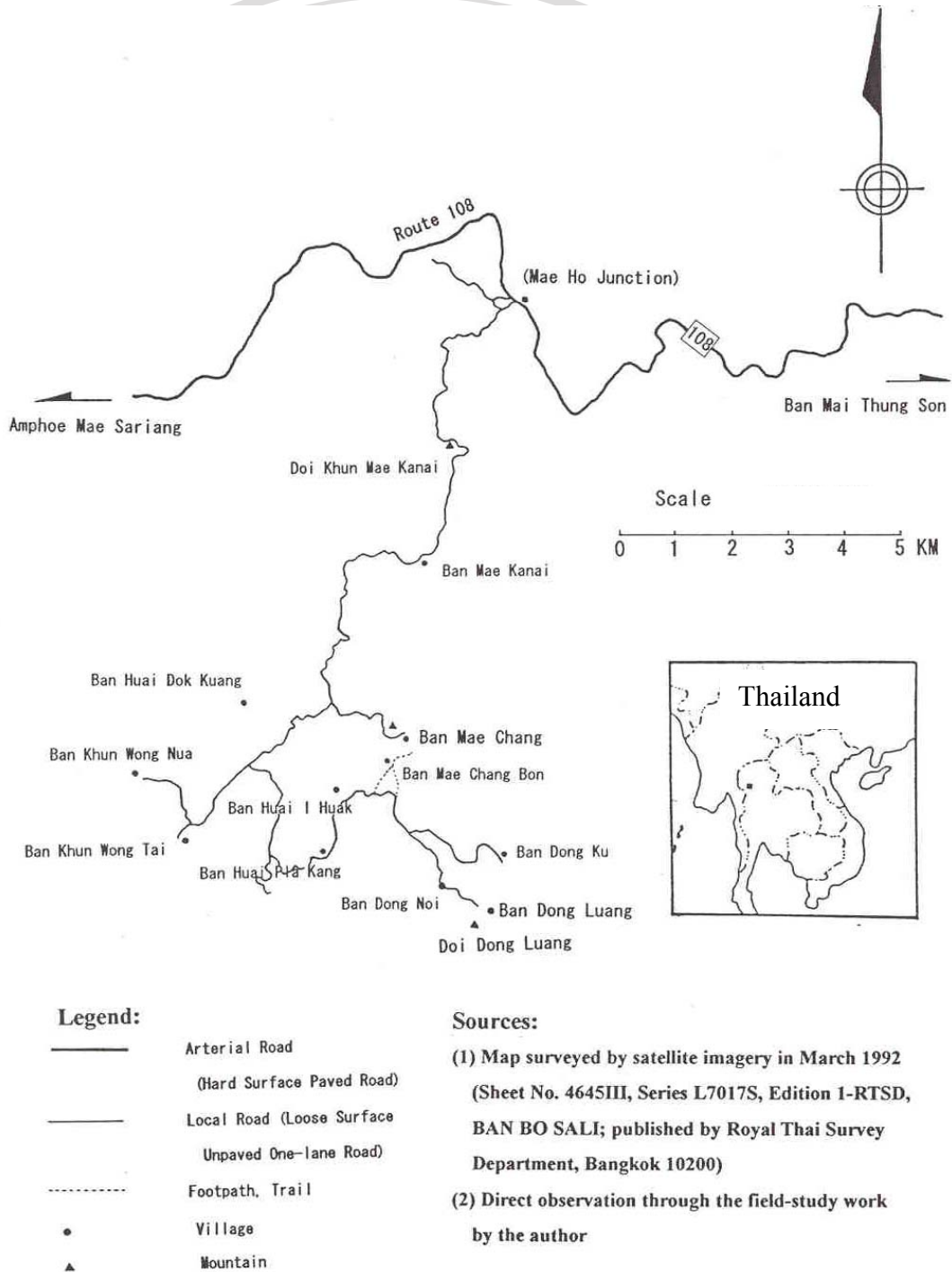
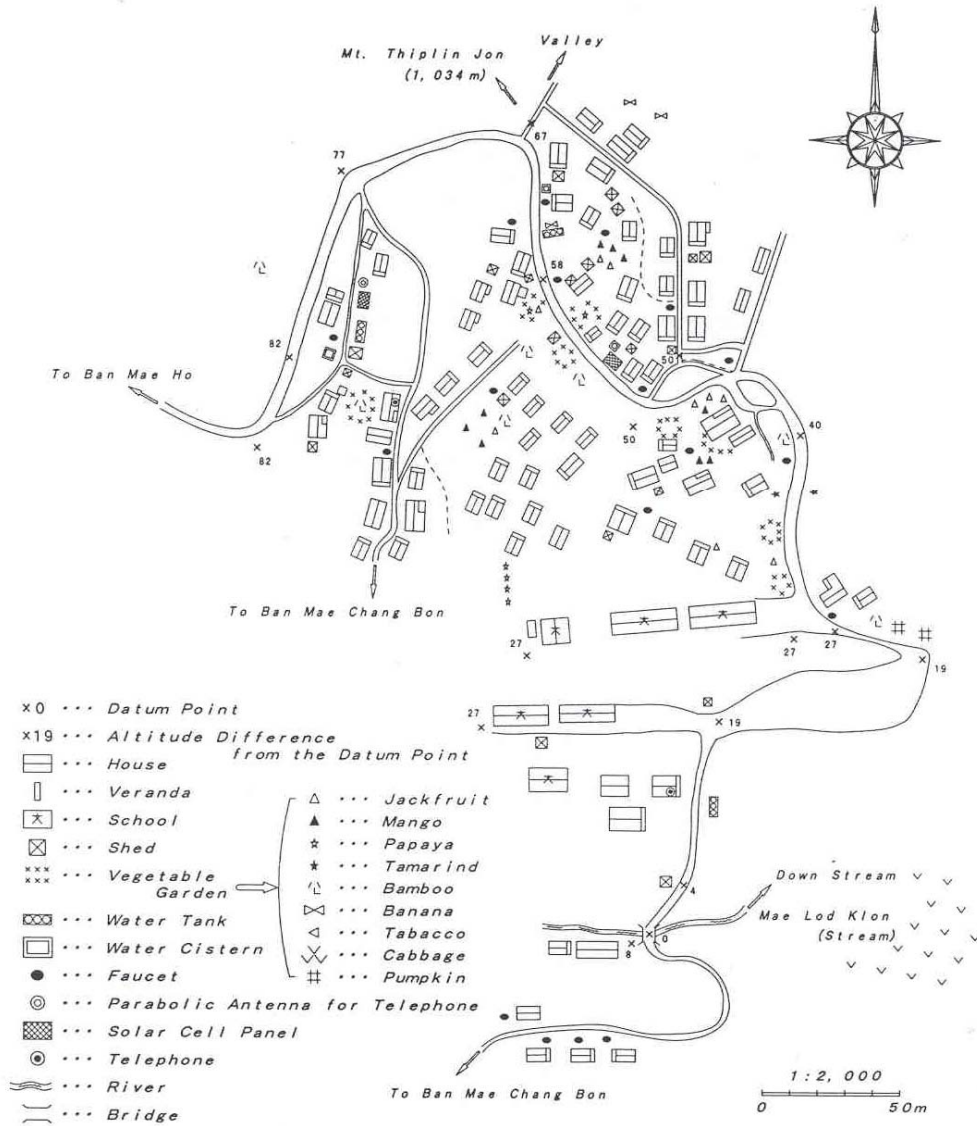


Figure 3.2 Residential Area of the Village: Ban Mae Chang (The Major Part)



*Cartography Project for Ban Mae Chang, Mae Sariang, Mae Hong Son, Thailand*

Director: Runako Samata (also serving as supervisor)

Assistant Engineer: Yuji Ito

Research Assistants: Students of Gakushuin University (GONGOVA2002 participants)

Research Advisors: Hirohisa Samata and Tatsuhiko Kawashima

First Survey : March 2002

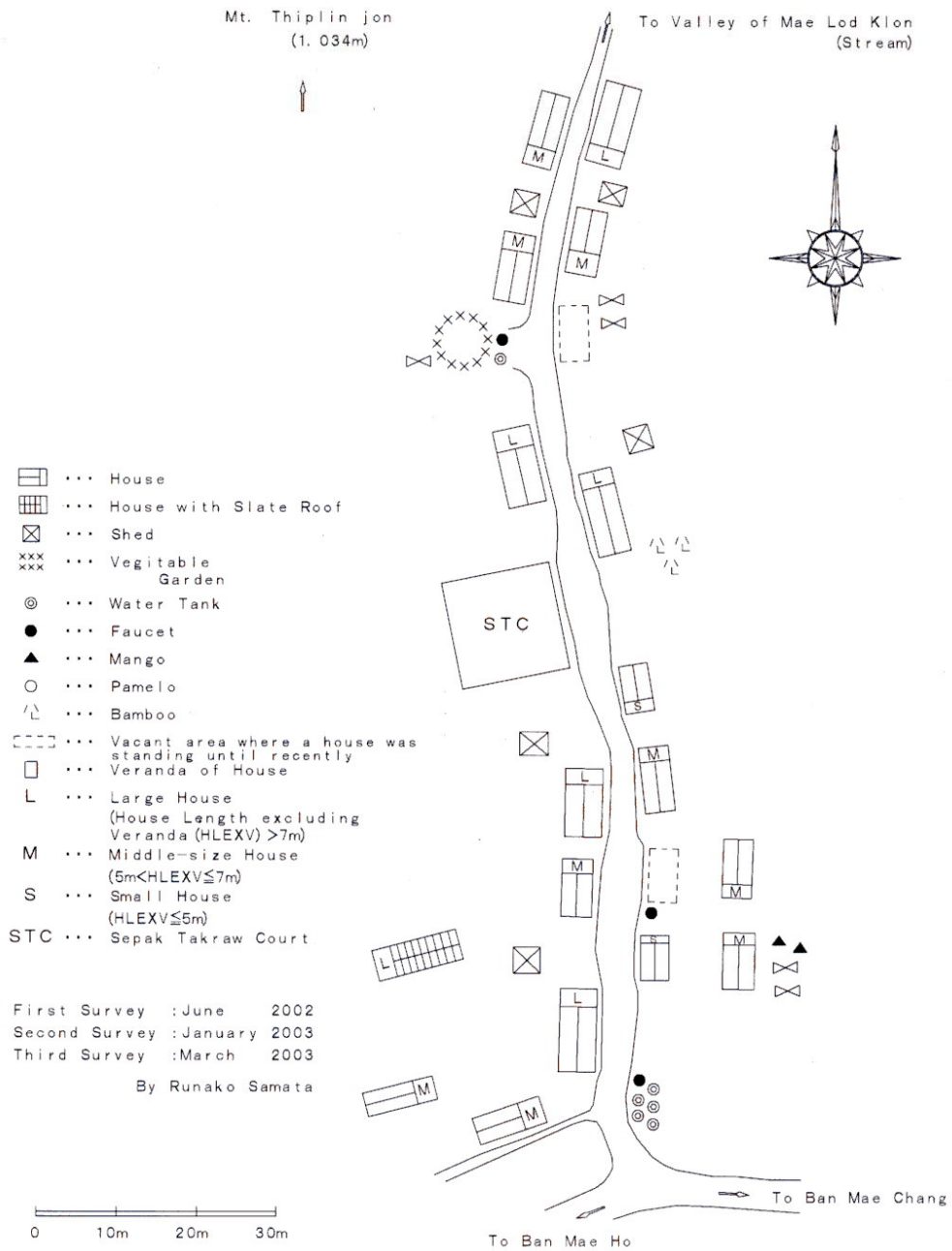
Second Survey: June 2002

Third Survey : August 2002

Forth Survey : December 2002

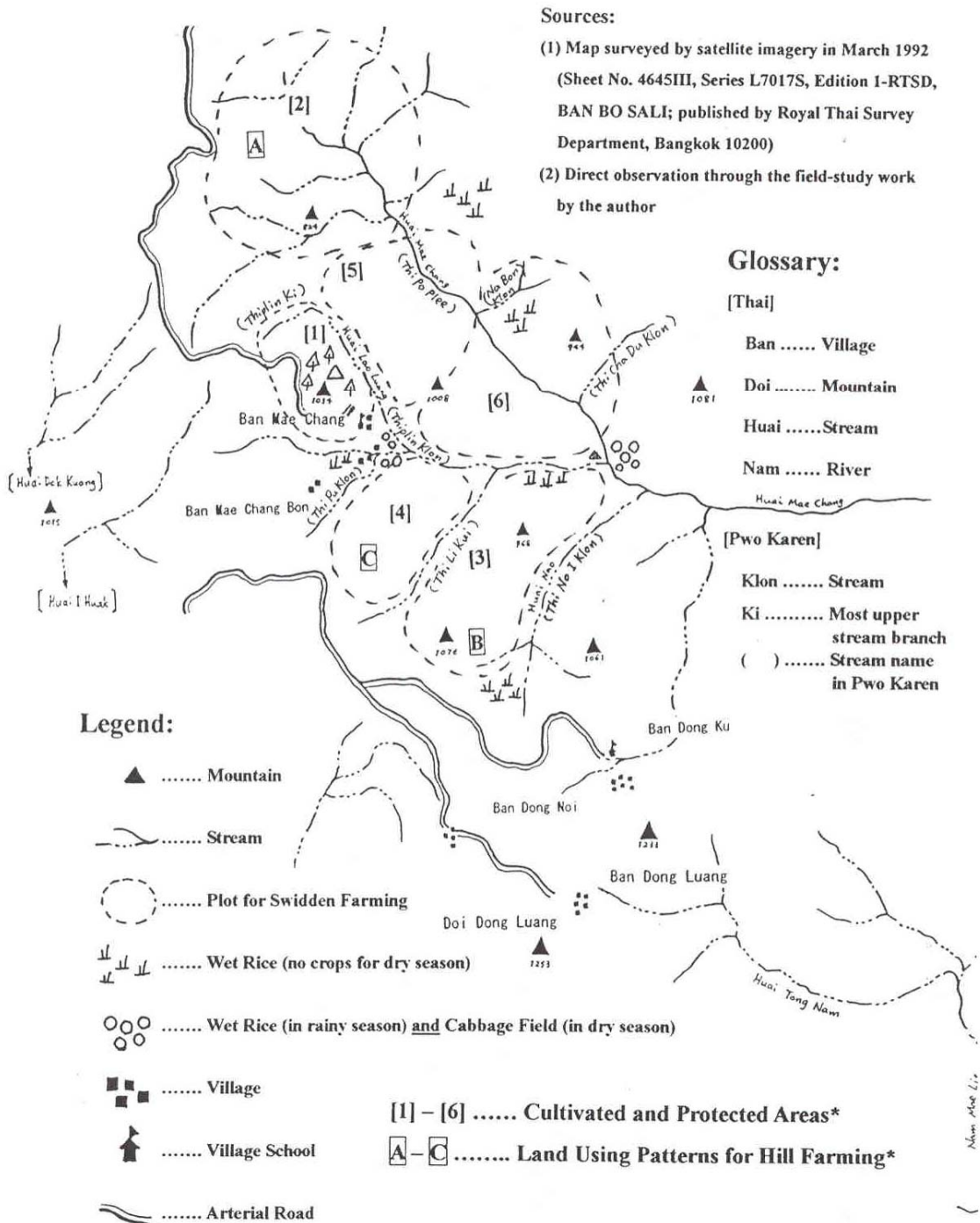
Fifth Survey : January 2003

**Figure 3.3 Residential Area of the Village: Ban Mae Chang Bon (The Satellite Part)**



ភិប  
 Cop  
 AI

Figure 3.4 Natural Resources and Land Use in Ban Mae Chang



(\* See the detail in next page.)



**Figure 3.4 (Continued)****Remarks for [1] – [6] and [A] – [C]**

[1] **Thiplin Phæ Area** (Protected forest including community forest area)

▲.....Mt. *Thiplin Jon*

Δ.....Mt. *Plon Alon Lu* (Burial Forest)

[2] **Vicinity to Ban Mae Kanai** (This place is close to the road.)

[A] Cultivated area: Cabbage (annually) and dry rice in rainy season

There are 6 households from Ban Mae Chang, holding land here.

(→ All cabbage producers benefited in 2002.)

[3] **Kui Pha Læ Area: Vicinity to Ban Dong (Luang & Noi)**

(This place is close to the road.)

[B] Cultivated area: Cabbage (annually) and dry rice in rainy season

(→ Some cabbage producers lost in 2002.)

[4] **Yo Lo Moi Area**

[C] Cultivated area in 2002:

Cabbage (For 2002 by Village Fund) and dry rice in rainy season

(→ Some cabbage producers lost in 2002.)

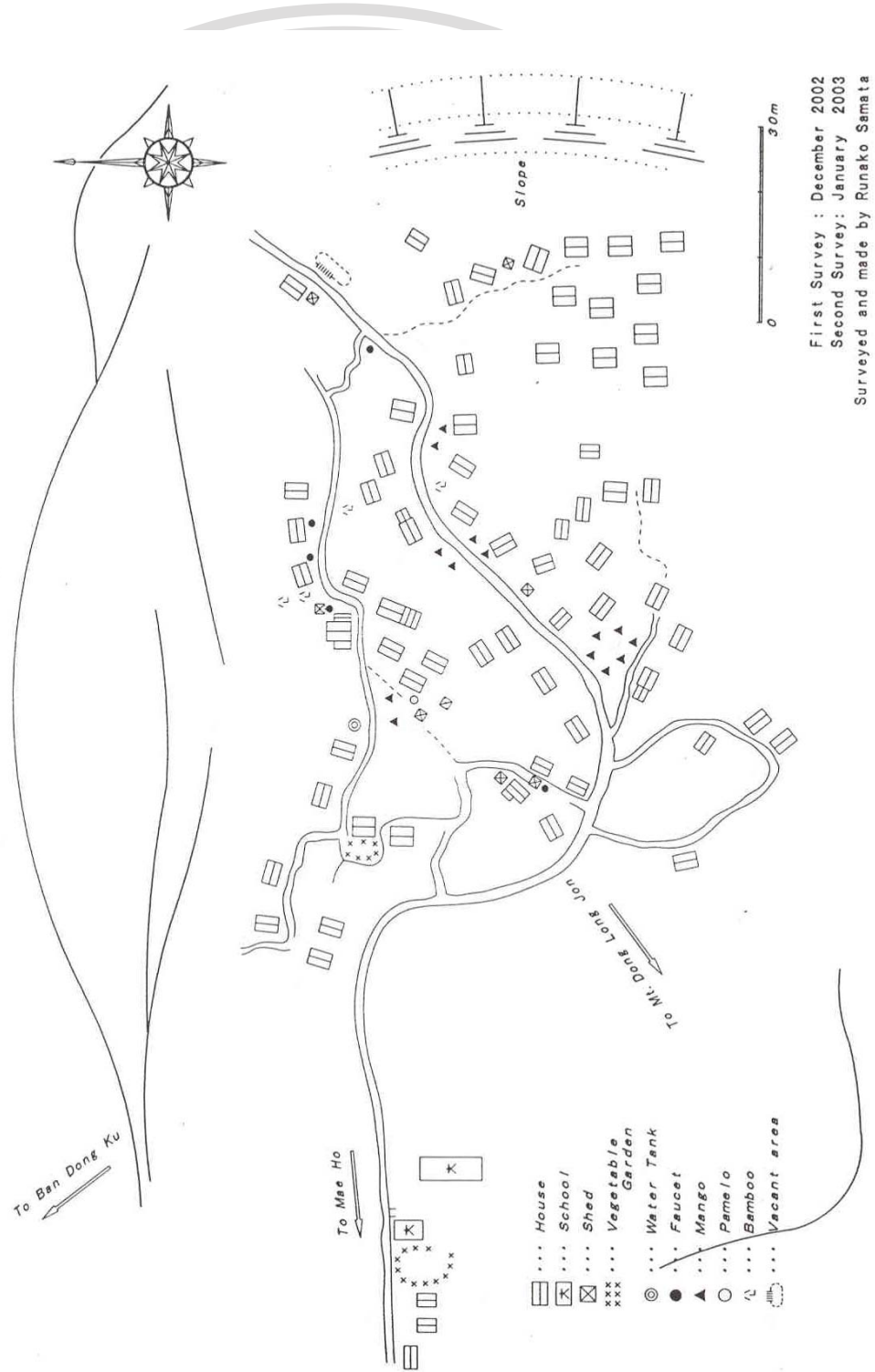
[5] **Du Li Khu Area**

Cultivated area in 2003: mainly for dry rice in rainy season

[6] **Tha Po Area**

Fallow area (Fallow period: around three or four years)

Figure 3.5 Residential Area of the Village: Ban Dong Luang (The Major Part)



**Table 3.1 Cash-income Classification of Households: Four-group and Two-group Classifications**

Four-group Classification		Two-group Classification	
Cash-income Class	Range of Cash Income (•) (Baht/year)	Cash-income Class	Range of Cash Income (•) (Baht/year)
Rich	$20,000 \leq \bullet$	Upper	$10,000 \leq \bullet$
Well-to-do	$10,000 \leq \bullet < 20,000$		
Middle	$4,000 \leq \bullet < 10,000$	Lower	$\bullet < 10,000$
Poor	$\bullet < 4,000$		

**Table 3.3 Per-household Income (Accruing from Cabbage Cultivation), Landholding, Rice Yield and Crude Rice productivity: By Income Class for Ban Mae Chaggi (in 2002)**

Surveyed: December 2002, Direct hearing from each household

A	B	Cash Income from Cabbage Cultivation (Baht/year)	D Landholding Size of Rai	E Landholding Size of Naa	F Rice Yield in 2002 (thang)	G Crude Rice-productivity F / (D+E)
Cash-income Class (Baht/year)	Number of Households	(Baht/year)	(rai)	(naa)	(thang)	(thang / rai)
<b>Rich</b> (20,000 ≤ •)	9	31,111 Max: 50,000 Min: 20,000	12.44 (RNR=5.60)	2.22	188.89	12.88
<b>Rich Well-to-do</b> (10,000 ≤ • < 20,000)	8 17	34,100 Max: 54,000 Min: 20,000	23.13 (RNR=8.03)	2.88	153.63	5.91
<b>Well-to-do</b> (4,000 ≤ • < 10,000)	10	10,500 Max: 15,000 Min: 10,000	30.80 (RNR=25.08)	0.50	178.26	13.89
<b>Poor (Middle)</b> (1,000 ≤ • < 4,000)	21 16	0 Max: 3,000 Min: 0	9.62 (RNR=20.45)	0.33	99.52	10.00
<b>All Poor</b> (• < 4,000)	63 17	9,523 (TI: 690,000) Max: 3,000 Min: 500	9.06 (RNR=11.47) (TI: 28,570) (RNR=13.73)	0.79 (TA: 50) 2.06	130.00 (TRY: 8,190)	13.19 3.97
[Notes]	(1) 1 rai = 0.16 ha, 1 thang = 20 kg of unhusked rice, Rai: Swidden, Naa: Irrigated terrace, RNR: Rai / Naa ratio (i.e., D / E), TI: Total income, TA: Total area, TRY: Total rice yield in 2002.					
	(2) Rice yield in column F: Yield of unhusked dry and wet rice					
	(3) The land area of D and E is not necessarily used only for rice yield. Some part of it may be used for the cultivation of cabbage and other crops, or lie in the state of fallow.					
	(4) It should be noted that the cash income in this table indicates only that accruing from cabbage cultivation. Hence, it excludes the income from labourer works and other income sources. In this sense, this table is incomparable with Table 3.2 when we try to compare the straightforward absolute income levels between the villages of Ban Mae Chaggi and Ban Dong Luang. But the two tables can be comparable with each other when we compare the "intra-village comparison through the relative income level" between the two villages.					
	(5) It is to be noted that the household with the income of 0.0 Baht would not necessarily mean that this household lives in dire poverty. It is highly possible that the household earns its income through the labourer works.					



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright © by Chiang Mai University  
All rights reserved